Appendix G – Implementation Monitoring: Project Review for Spruce Beetle Epidemic and Aspen Decline Management Response
10/15/14 DRAFT

Objectives of the Monitoring Plan/ Project Review

The project review is a monitoring method that provides documentation that we are doing what we said we would do; projects are implemented as planned. The project review, combined with monitoring results and/or research findings, is intended to provide feedback to forest managers about how to best design and implement future treatments in the project area. The results of this monitoring will identify improvements to procedures or exemplary practices that will benefit future treatments authorized by the record of decision. (See Figure 1).

Focus of the Project Review

The plan described here assumes implementation of the treatments described in the DEIS treatment matrix will be conducted in conjunction with the use of the design features described in the DEIS, thus ensuring that treatments are designed and implemented according to the assumptions described and disclosed in the DEIS.

A type of monitoring that would occur during project review includes, but is not limited to, monitoring of the use of Best Management Practices for Water Quality Management on National Forest System Lands[1]. The monitoring procedures, personnel, timing, and tracking are explained in the Best Management Practices Protocols and Evaluation forms[2]. The focus of this monitoring is documentation of the use of soil and water Best Management Practices (BMPs) on a treatment.

Project reviews will also document a) the correct design features were selected from the list of design features in the EIS and b) that the design features were, in a readily observable way, effective. This review will be completed when the BMP evaluation is completed. Project reviews will be completed by an interdisciplinary team of resource specialists.

Findings from the project reviews can also be a mechanism to complete year-end reporting to regulatory agencies. For example, one of the design features for Canada lynx is to protect high quality habitat (greater than 35% dense horizontal cover) in the form of live advanced regeneration in blocks of 0.3 acres or larger. Project reviews will determine if this feature was followed and in a readily observable way, was it effective. Validation of adherence with the standard will be reported to the US Fish and Wildlife Service on an annual basis.

Avoidance and protection of archeological resources is another reporting requirement. If a project review indicates a particular treatment did not follow a design feature, the report to the

[1] National Best management Practices for Water Quality Management on National Forest System Lands http://www.fs.fed.us/biology/resources/pubs/watershed/FS_National_Core_BMPs_April2012.pdf
[2] BMP Monitoring Protocols and Forms http://fsweb.wo.fs.fed.us/wfw/watershed/national_bmps/bmp_docs-vegetation.html

regulatory agency will include “corrective actions” to bring the Forest back into compliance. Most of the time, this will be an administrative fix (for example, working with the sale administrator to ensure archeological resources are flagged before ground disturbing activities occur).

Results from the project review will be part of the annual reporting to the Forest Leadership Team for the Management Review. The Management Review could result in changes to design features to make them more effective; additional features could be added if needed. Management review could also identify additional monitoring measures that may be needed.

Management Reviews will also consider new best available science, changes in agency policy or direction, or changed conditions (such as the US Fish and Wildlife Service listing a species as threatened or endangered), and determine whether those changes warrant modified design features or modification of project planning or implementation. In some cases, the changed conditions may bring into question whether the scope and range of effects disclosed in this analysis are exceeded. Such questions would require the Forest to undertake an interdisciplinary review of the sufficiency of the NEPA documentation prepared for this project. The review may show the information in the original decision is still valid, and is not in need of correction or supplement. However, if that review illustrates a need for a correction, supplement or revision to the original decision, then the specific process to correct, supplement, or revise the analysis would be used, as specified in FSH 1909.15(18.2).

If the Forest Leadership Team makes changes to design features, implementation checklists, or monitoring, whether through correction, supplement, or revision, those changes will be applied to all future treatments on the GMUG NF which are authorized by the record of decision for this analysis.

The figure below shows how project review fits into the implementation strategy.

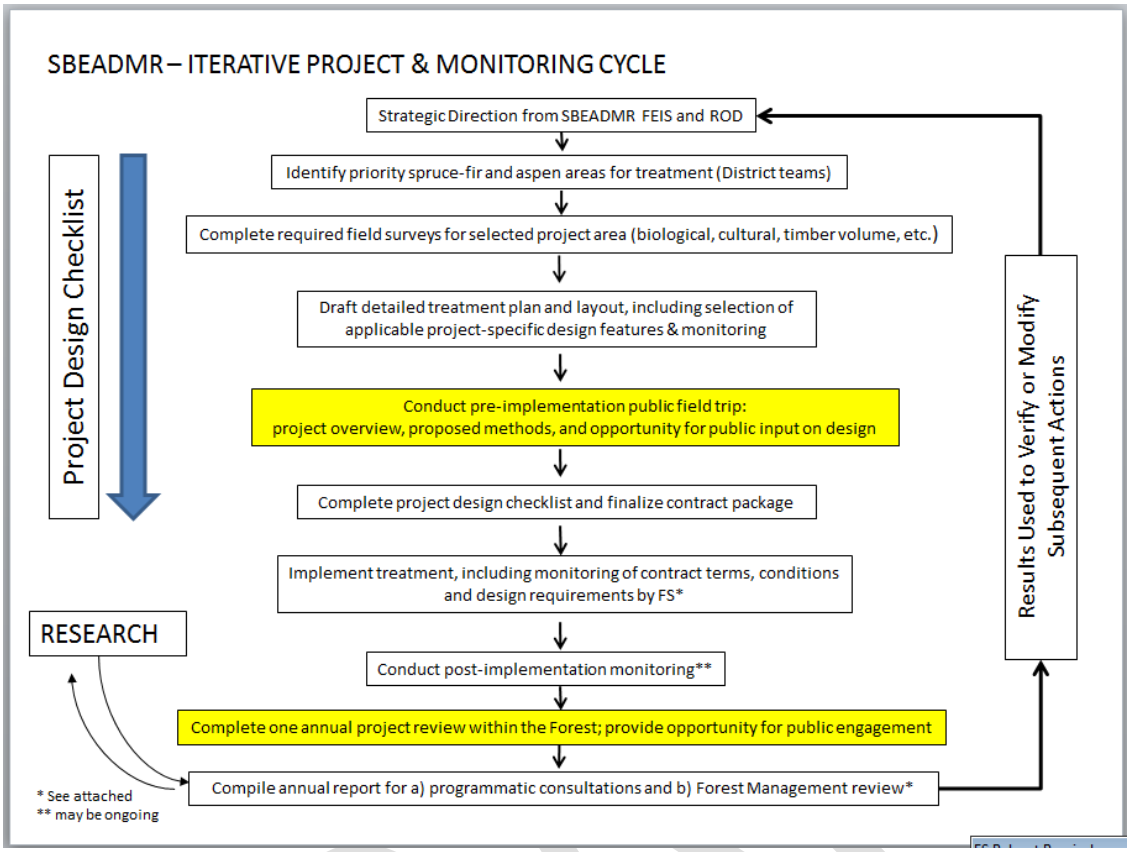

Figure 1

Project Selection

Review Team

At a minimum, the review team should include the District Ranger for the unit, the unit project lead, the project administrator, and specialists from the project resource issue areas, e.g. silviculture, fuels, wildlife, aquatics, soils, hydrology, etc.

The unit line officer will designate the review team leader.

Document Review

The project review process relies on existing Forest Service documents and records. As indicated in Table A-1, the documents might vary depending on whether the project is a timber sale, stewardship contract, service contract, or force account.

A document review is intended to be a fairly brief exercise (1/2 day per project). The document review will focus on the project implementation checklist and supporting documentation. The team should review or be familiar with the project documents, but should rely upon the responsible or most knowledgeable team members to orient them to the project and documentation and explain 1) how design features were selected and 2) how design features were implemented on-the-ground.

The field review will focus on an identified subset of the applied design features. This subset may be chosen to maximize the learning opportunity and/or based on public interest. It will usually not be possible to review all prescribed design features in the field.

Things to consider when choosing design features to review and monitor in the field:

- Design features with readily observable evidence of their implementation
- Line officer concern
- Unconventional or experimental mitigations
- Design features specifically requested by the public or regulatory agencies
- Design features critical to environmental protection
- Design features that relate to project appeal points
- Design features related to the issues identified in the EIS

Table A-1 provides a list and description of the records that forests should consider during the document review of a project. During the document review, the review team will check the documents listed in Table A-1 for evidence that project identification and implementation reflected SPEADMR guidance.These documents should already be part of the project record and should remain on file in the forest-level file system.

The attached Project Information Form will be completed during the document review. A Design Feature Score Card will be completed for each design feature reviewed in the field

Table A-1 Documents and Records for Use in SPEADMR Project Review

Process Step	Relevant Records	Stage of Review
COMPLIANCE ***Monitoring conducted for general project design and implementation, all design features, and project-specific monitoring.***		
1. Project Implementation checklist completed (including surveys, documentation of Forest Plan compliance, detailed treatment plan, and identification of project-specific monitoring)	Project Implementation Checklist	Document Review
2. Were the design features identified in the implementation checklist incorporated in the project contract/force account instructions/burn plan objectives?	Project Implementation Checklist, Section 5	Document Review
	Silvicultural prescription (i.e., wildlife treatment, prescribed fire, etc)	
	Layout/marking instructions	
	Contracts: Timber sale contract or stewardship contract or service contract Force Account Projects: Force account instructions	
	Other documents specific to a region's or a forest's contracting processes. *An example is the timber sale report prepared by some forests in Region 2 that document how each NEPA mitigation measure was addressed in the timber contract.*	

Process Step	Relevant Records	Stage of Review
3. Were the design features implemented on the ground?	Timber contract: Sale administrator's timber sale inspection reports Service Contract: Contracting Officer Representative's (COR's) daily diaries and inspection reports Force Account: Project leader's daily diaries and inspection reports[1]	Document Review
4. Was identified project-specific monitoring conducted? ***(Secondary question: What did monitoring reveal?)***	Project Implementation Checklist, Section 7 Records of monitoring data	Document Review
EFFECTIVENESS ***Monitoring conducted for a subset of design features and for the use of BMPs for Water Quality Management.***		
1. Were the *correct* design features selected from available menu?	Project Implementation Checklist, Section 5	Field Review
2. Were the design features, as readily observed,*effective*?		Field Review
3. Monitor use of the BMPs for Water Quality Management on NFS Lands		Field Review

Field Review:

Based on the document review, the team will select which design features to further review in the field, along with the associated activity units, roads, landings, or other components of the project..

The review itinerary should be planned to fill a full day in the field for each project.The emphasis is on documenting readily observable evidence of the effective implementation of the prescribed design features.

Rows 6 and 7 of the Design Feature Score Card will be completed during the field review.

Records Management

Completed Project Information Forms and Design Feature Score Cards will be filed withthe SPEADMR project leader at the Supervisor's Office. The team leader will also tally the scores for all the design features reviewed on Project Summary Score Card.

As noted above, the SPEADMR project leader will use these materials to prepare an annual report on SPEADMR implementation, in combination with additional project monitoring results and/or research findings.

SPEADMR Project Information Form

District:_____

Project Name:_____

Total Acres Treated by Project: _____ Number of Treatment Units _____

Implementation Document Type: (Circle one) Timber Contract /Stewardship/Service Contract/Force Account)

Implementation Document Name and Approval Date:_____

_____

Dates of Review: _____

Project Review Team

Enter the names and position titles of all the review team members.

Name	Position/Specialty
	Project Leader
	SPEADMR Leader

Instructions for Reviewing Design Features

Only design features selected for review need be recorded. See suggested criteria, under document review, above. Use a new form for each design feature reviewed. (See example, below). **Row 1 –** Describe the design feature and the year work was completed on the ground.

Row 2 – Why was this design feature selected for review? See list on page 3, above.

Row 3 – What is the source of direction to include this design feature, e.g. forest plan, threatened and endangered species consultation requirement, etc. Cite referenced documents with page number, if appropriate.

Row 4 – Briefly describe how the design feature was incorporated into the project contract, silvicultural prescription, layout instructions, etc. Specific questions to consider include:

- How were the requirements conveyed to the implementing personnel, e.g. pre-sale/prep crew?
- Which project contract clauses or other contract instruments were used to implement the design feature?

Row 5 – Document whether there was routine monitoring of the project that checked for implementation of the design feature. For example, do the timber sale inspection reports or contracting officer representative daily diaries document that the project was monitored on a regular basis?

Row 6 – Briefly describe evidence that the design featurewas implemented in the field as designed. Reference the contract unit in which the observations were made.

Row 7 – Record any additional observations. This could include any major problems noted with the design feature and/or any exemplary practices noted. For example, was there anything about how the design feature was planned or implemented that should be considered in future projects?

Row 4, 5 and 6 Ratings – Provide the rating that represents the consensus of the review team for the question in each row. The rating score recognizes that this assessment is qualitative.

A - Full evidence that mitigation measure was designed and/or implemented according to the relevant portions of the 4-step operational control.
B - Partial evidence that mitigation measure was designed and/or implemented according to the relevant portions of the 4-step operational control.
C - Insufficient evidence that mitigation measure was designed and/or implemented according to the relevant portions of the 4-step operational control.

Design Feature Score Card

Project Name:			**Mitigation ___ of ___ Reviewed**
Row	**Operational Control Step**	**Evidence Observed**	**Rating**
1	**Describe design feature, including year work was completed**		N/A
2	**Reason selected for review.**		N/A
3	**Source of direction used to design the mitigation measure?** *(Cite document and page reference where applicable)*		N/A
6	**Step 1: Was the design featureimplemented on the ground as planned?** *(Cite project activity units in which observations were made)*		

Project Name:			**Mitigation ___ of ___ Reviewed**
Row	**Operational Control Step**	**Evidence Observed**	**Rating**
7	**Step 2: Was the design feature effectively implemented, as readily observed?**		
8	**Other observations or comments:**		N/A

Project Summary Score Card

Region:_____ Forest: _____

Project Name: _____

Element	Resource	Step 1	Step 2
Overall Project			
Mitigation 1			
Mitigation 2			
Mitigation 3			
Mitigation 4			
Mitigation 5			
Mitigation 6			
Mitigation 7			
Mitigation 8			
Mitigation 9			
Mitigation 10			
Mitigation 11			
Mitigation 12			
Mitigation 13			
Mitigation 14			
Mitigation 15			
Mitigation 16			
Mitigation 17			
Mitigation 18			
Mitigation 19			
Mitigation 20			

A – Full Evidence
B – Partial Evidence
C – Insufficient Evidence
Mitigation # is keyed to the individual Mitigation Measure Score Card

SAMPLE Project Information Form

District: **Corey**

Project Name: **Example 1 Timber Sale**

Total Acres Treated by Project: **542** **Number of Treatment Units** **7**

Implementation Document Type (Timber Contract/)

Implementation Document Name and Approval Date: Example 1 Timber Sale 5/6/2006

Dates of Review: June 18-19, 2009

Project Review Team

Enter the names and position titles of all the review team members.

Name	Position/Specialty
Amanda Brown	Team Leader
Donna Smith	Unit Line Officer
Bob Stone	Unit EMS Representative
Don Stump	Project Administrator
Paula Green	District Biologist
Susan Reynolds	District Silviculturist

SAMPLE 1: Mitigation Measure Score Card

Project Name: Example 1 Timber Sale			**Mitigation 1 of 8 reviewed**
Row	**Operational Control Step**	**Evidence Observed**	**Rating**
1	**Describe mitigation measure including year work that was completed and the page number where it was listed in the NEPA document.**	Maintain 10% of the unit in untreated clumps. Completed September 2008. Referenced on page 24 of the EA.	N/A
2	**Reason selected for review.**	The public has expressed concern that this forest plan standard is not being consistently implemented as intended.	N/A
3	**Source of direction used to design the mitigation measure?** *(Cite document and page reference where applicable)*	Forest plan, page III-71	N/A
4	**Step 3: How was the mitigation measure incorporated in the layout instructions, project contract or force account instructions?**	• Wildlife clumps described on page 7 of Silv. Rx. Marking guidelines described on page 14.. • Leave clumps are also discussed in the BE, page 4, where they are described as being at least 5 chains from the unit boundary. • Leave clumps indicated on Layout Instructions' Unit sketch maps for Units 2 and 9. Instructions to layout crew did not indicate leave clumps for Unit 11 • B 2.35 Individual Trees indicates that cut trees are individually marked with blue paint. C2.3 Reserve Trees indicates trees within designated reserve boundaries are to be protected during operations. Leave clumps are indicated on the Sale Area	B

Project Name: Example 1 Timber Sale			Mitigation 1 of 8 reviewed
Row	**Operational Control Step**	**Evidence Observed**	**Rating**
		Map.	
5	**Step 4a: Is there evidence of routine monitoring (administration) of the implementation of this mitigation measure?**	Timber Sale Inspection Reports show frequent visits to the sale units. Inspection Reports indicate that reserve trees were protected during skidding. .	A
6	**Step 4b: Was the mitigation measure implemented on the ground as planned?** *(Cite project activity units in which observations were made)*	Ocular estimate of TS units 2 and 9 indicates at least 10 percent of the unit in clumps. Unit 11 appeared to have less than 10 percent of the unit in clumps. Forest Biologist believes this didn't meet the EA intent of providing hiding cover within the unit. Review Team determined that problems in Unit 11 were due to inadequate layout instructions, not inadequate contract implementation.	A
7	**Other observations or comments:**	Leave clumps in units 2 and 9 are intact one year after harvest. Windfall observed in Unit 11	N/A

SAMPLE 2: Mitigation Measure Score Card

Project Name: Example 1 Timber Sale			Mitigation 2 of 8
Row	**Operational Control Step**	**Evidence Observed**	**Rating**
1	**Describe mitigation measure including year work was completed and the page number where it was listed in the NEPA document.**	Waterbar and revegetate temp roads, landings and skid trails using native seed sources; implemented August 2008; page 25 of EA.	N/A
2	**Reason selected for review.**	The district has a poor track record in closing temporary roads.	N/A
3	**Source of direction used to design the mitigation measure?** *(Cite document and page reference where applicable)*	Forest Plan, page III-42	N/A
4	**Step 3: How was the mitigation measure incorporated in the layout instructions, project contract or force account instructions?**	Specification for seeding described in Operating Area Revegetation Plan. • B 6.6 Erosion Prevention and Control, B6.63 Temporary Roads, B.6.64 Landings, B6.65 Skid Trails and Fire Lines, B6.67 Erosion Control Structures, CT6.601 Revegetation Plan and Specifications	A

Project Name: Example 1 Timber Sale			**Mitigation 2 of 8**
Row	**Operational Control Step**	**Evidence Observed**	**Rating**
5	**Step 4a: Is there evidence of routine monitoring (administration) of the implementation of this mitigation measure?**	Timber Sale Inspection Reports show that the Sale Administrator visited the site regularly and that he had conversations with the contractor about spacing and design of water bars.	A
6	**Step 4b: Was the mitigation measures implemented on the ground as planned?** *(Cite project activity units in which observations were made)*	Waterbars were in place on skid trails on units 2, 3, 9 and 11. The barrier on the temp road in unit 11 was ineffective and the waterbars had been breached by vehicle traffic with apparent sediment transport to Knotty Creek. This appears to have occurred after the sale was completed. Skid trails show evidence of seeding, seed appears to have been washed away on much of the temp road in unit 11. All waterbars observed appeared to be functioning except those on the temp road in unit 11.	B
7	**Other observations or comments:**		N/A